

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. **(Currently Amended)** A method comprising the steps of:

establishing a connection between a ~~multi-homed network-connected~~ general purpose computer and ~~an arrangement for a router~~ linking said general purpose computer to at least a first internet service provider and a second internet service provider (ISP), the general purpose computer being situated at an edge of a network and configured to originate outgoing packets;

utilizing the general purpose computer to perform one or more of active and passive measuring of relevant performance and availability metrics of links to the at least first internet service provider and the second internet service provider ~~ISP at said multi-homed network-connected general purpose computer;~~ and

utilizing the ~~multi-homed network-connected~~ general purpose computer for performing network route control functions, said network route control functions comprising ~~making a routing control decision at said multi-homed network-connected general purpose computer prior to sending a packet comprising network traffic~~ labeling outgoing packets for an internet service provider specific path prior to sending the outgoing packets to the router;

wherein said ~~multi-homed-network-connected~~ general purpose computer ~~makes~~ performs the routing control functions ~~decision to direct the packet to an outgoing link to~~ one of the first ISP and the second ISP based upon said relevant performance and availability metrics; and

wherein the ~~multi-homed-network-connected~~ general purpose computer is configured to perform the network route control functions without external network appliances and without a dedicated route control device.

2. **(Currently Amended)** The method according to Claim 1, wherein said ~~connection is accomplished through~~ specific path comprises a Multi-protocol Label Switching (MPLS) switched paths path; and wherein the ~~multi-homed-network-connected~~ general purpose computer sends the outgoing packets labeled with one of a first label corresponding to a first switched path and a second label corresponding to a second switched path.

3. **(Currently Amended)** The method according to Claim 1, wherein said ~~connection is accomplished through~~ specific path comprises a Virtual Local Area Network (VLAN) ~~tunnels~~ tunnel; and wherein the ~~multi-homed-network-connected~~ general purpose computer sends packets with VLAN identifiers ~~specifying a specific IP link on which the packets should be forwarded.~~

4. **(Currently Amended)** The method according to Claim 1, wherein said ~~connection is accomplished using~~ ISP specific path comprises an Internet protocol (IP)-level ~~tunnels~~ tunnel; and wherein the ~~different~~ IP-level tunnels are assigned to different

virtual interfaces on the ~~multi-homed network-connected~~ general purpose computer, each virtual interface corresponding to a different ISP link.

5. **(Previously Presented)** The method according to Claim 1, wherein the relevant performance and availability metrics comprise network delay.

6. **(Previously Presented)** The method according to Claim 1, wherein the relevant performance and availability metrics comprise network loss.

7. **(Previously Presented)** The method according to Claim 1, wherein the relevant performance and availability metrics comprise network throughput.

8. **(Previously Presented)** The method according to Claim 1, wherein the relevant performance and availability metrics comprise application-layer response time.

9. **(Previously Presented)** The method according to Claim 1, wherein the step of measuring relevant performance and availability metrics comprises making passive measurements, wherein the general purpose computer utilizes applications running on the general purpose computer to measure the relevant performance metrics in an application-specific manner.

10. – 18. **(Cancelled)**

19. **(Currently Amended)** A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform ~~method~~ steps comprising:

establishing a connection between a ~~multi-homed-network-connected~~ general purpose computer and ~~an arrangement for a router~~ linking said general purpose computer to at least a first internet service provider and a second internet service provider (ISP), the general purpose computer being situated at an edge of a network and configured to originate outgoing packets;

utilizing the general purpose computer to perform one or more of active and passive measuring of relevant performance and availability metrics of links to the at least first internet service provider and the second internet service provider ISP ~~at said multi-homed-network-connected-general-purpose-computer;~~ and

utilizing the ~~multi-homed-network-connected~~ general purpose computer for performing network route control functions, said network route control functions comprising ~~making a routing control decision at said multi-homed-network-connected general-purpose-computer prior to sending a packet comprising network traffic labeling outgoing packets for an internet service provider specific path prior to sending the outgoing packets to the router;~~

wherein said ~~multi-homed-network-connected~~ general purpose computer ~~makes~~ performs the routing control functions ~~decision to direct the packet to an outgoing link to one of the first ISP and the second ISP based upon said relevant performance and availability metrics; and~~

wherein the ~~multi-homed network-connected~~ general purpose computer is configured to perform the network route control functions without external network appliances and without a dedicated route control device.

20. **(Cancelled)**

21. **(Currently Amended)** A multi-homed network-connected general purpose computer comprising:

a processor; and

a program storage device tangibly embodying a program of instructions executable to perform:

originate outgoing packets labeled for a specific path corresponding to one of a first internet service provider and a second internet service provider;

establishing a connection between the multi-homed network-connected general purpose computer and ~~at least a~~ the first internet service provider and ~~[[a]]~~ the second internet service provider (ISP);

utilizing one or more of active and passive measuring of relevant performance and availability metrics of links to the ~~at least first~~ first internet service provider and the second internet service provider ISP; and

performing network route control functions, said control functions comprising ~~making a routing control decision prior to sending a packet~~

~~comprising network traffic~~ labeling an outgoing packet for an internet service provider specific path prior to sending the packet to a router;

wherein said multi-homed network-connected general purpose computer is configured to ~~make~~ perform the routing control ~~functions~~ decision to direct the packet to an outgoing link to one of the first ISP and the second ISP based upon said relevant performance and availability metrics; and

wherein the multi-homed network-connected general purpose computer is configured to perform the network route control functions without external network appliances and without a dedicated route control device.

22. **(Currently Amended)** The multi-homed network-connected general purpose computer according to Claim 21, wherein the specific path comprises a Multi-protocol Labeled Switching switched path; and wherein the multi-homed network-connected general purpose computer is configured to send packets labeled with one of a first label and a second label corresponding to one of a first Multi-protocol Label Switching switched path and a second Multi-protocol Label Switching (MPLS) switched ~~paths~~ path in an application specific manner based on the relevant performance and availability metrics.

23. **(Currently Amended)** The multi-homed network-connected general purpose computer according to Claim 21, wherein the multi-homed network-connected general purpose computer is configured to ~~send~~ label packets with Virtual Local Area Network (VLAN) identifiers specifying a specific IP link on which packets should be forwarded in

an application specific manner based on the relevant performance and availability metrics.

24. **(Currently Amended)** The multi-homed network-connected general purpose computer according to Claim 21, wherein the multi-homed network-connected general purpose computer is configured to label the packets for ~~with~~ internet protocol (IP)-level tunnels assigned to different virtual interfaces on the multi-homed network-connected general purpose computer, each virtual interface corresponding to a different ISP link.

25. **(Previously Presented)** The multi-homed network-connected general purpose computer according to Claim 21, wherein the relevant performance metrics comprise network delay.

26. **(Previously Presented)** The multi-homed network-connected general purpose computer according to Claim 21, wherein the relevant performance metrics comprise network loss.

27. **(Previously Presented)** The multi-homed network-connected general purpose computer according to Claim 21, wherein the relevant performance metrics comprise network throughput.

28. **(Previously Presented)** The multi-homed network-connected general purpose computer according to Claim 21, wherein the relevant performance metrics comprise application-layer response time.

29. **(Previously Presented)** The multi-homed network-connected general purpose computer according to Claim 21, wherein the multi-homed network-connected general purpose computer is configured to make passive measurements utilizing applications running on the multi-homed network-connected general purpose computer to measure at least one relevant performance metric in an application-specific manner.